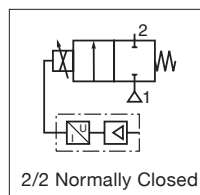


# PRECIFLOW PROPORTIONAL VALVES

- Preciflow solenoid valves are designed to proportionally control the flow of air and inert gases by varying the electrical input signal to the coil
- Low hysteresis (<5%), excellent repeatability (<1%), and high sensitivity (<0.1%) make these valves ideal for high precision flow control
- Compact frictionless architecture saves valuable space in analytical and medical instrumentation
- Valves do not require a minimum operating pressure, and are well-suited for vacuum operation
- Power consumption as low as 1W to meet the most stringent instrument power requirements
- Meets all relevant CE directives, and are RoHS compliant
- Typical Applications Include:
  - Gas Chromatography
  - Mass Flow Controllers
  - Dental Equipment
  - Blood Pressure Monitoring



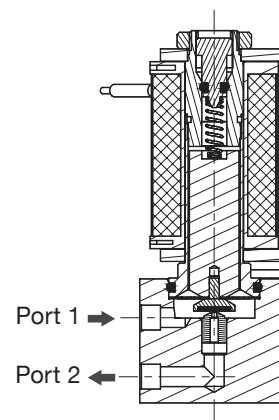
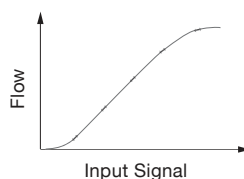
Fluids*	Temperature Range	Seal Materials*
Air, Oxygen, Inert Gas <sup>1</sup>	0 °C to 55 °C (32 °F to 131 °F)	FKM/FFKM

<sup>1</sup> Filtration: 5µm

\* Ensure that the compatibility of the fluids in contact with the materials is verified

Materials in Contact with Fluid*	
Body	Brass
Seals	FKM/FFKM
Others	Stainless Steel

\* Other materials on request



Electrical Characteristics	
Coil Insulation Class	F
Connector	Lead Wires 24 AWG; L = 500mm
Electrical Safety	IEC 335
Electrical Enclosure Protection	IP50
Standard Voltages	6 VDC, 12 VDC, 24 VDC
Voltage Regulation	0-6 VDC, 0-12 VDC, 0-24 VDC Pulse-width Modulation (>1000Hz)
Flow Regulation Characteristics	Hysteresis typ. 5%; Repeatability typ. 1%; Sensitivity typ. 0.1%

Voltage	Max. Operating Current	Power Ratings			Ambient Temperature Ranges
		Inrush	Holding	Hot/Cold	
V	mA	VA	VA	W	°C (°F)
6	170	-	-	-	0 to 55 (32 to 131)
	420				
12	85				
	210				
24	45				
	110				

Specifications						
Orifice Size	Flow Coefficient		Pressure Differential bar (psi)		Power Coil (W)	Catalog Number
mm (inches)	Kv (m3/h)	Cv	min.	max.	=	pad mount version
0.045 (0.0018)	0.00006	0.00007	-0.9 (-13)	10 (145)	1	R202A540L0XXXXX
0.07 (0.0023)	0.00012	0.00014	-0.9 (-13)	10 (145)	1	R202A541L0XXXXX
0.1 (0.0040)	0.0003	0.00035	-0.9 (-13)	10 (145)	1	R202A542L0XXXXX
0.2 (0.0079)	0.0012	0.00139	-0.9 (-13)	10 (145)	1	R202A543L0XXXXX
0.4 (0.0157)	0.0048	0.0055	-0.9 (-13)	10 (145)	2.5	R202A544L0XXXXX
0.6 (0.0236)	0.0096	0.0111	-0.9 (-13)	10 (145)	2.5	R202A545L0XXXXX
0.8 (0.0315)	0.018	0.0208	-0.9 (-13)	10 (145)	2.5	R202A546L0XXXXX

## How to Order

**Catalog Number** (see table "Specifications")

**Connector**

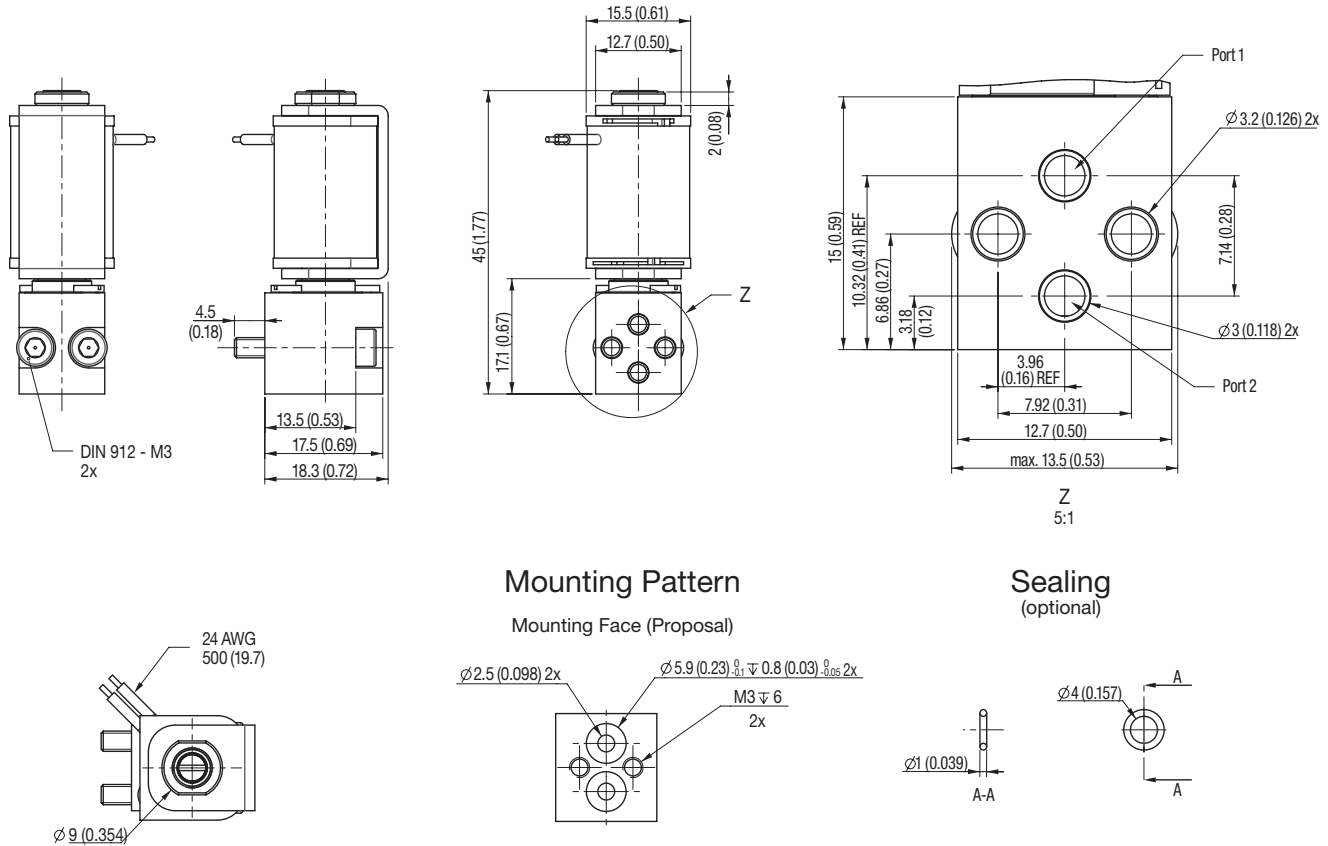
**Voltage**

**Seal Materials**

Ordering Example: R202A542L0V00F1 = 2-way NC (normally closed), orifice size 0.1mm, with lead wires L=500mm, FKM seal, 24 VDC

## Dimensions: mm (inches)

### Dimensional Drawing



### Options

- Digital control module Control<sup>D</sup> for DIN EN 50022 rail mounting
  - Used as a current regulator in open loop applications
  - Used with an external sensor for closed-loop applications
- Other materials and voltages available on request
- Sealing FFKM: 514684-002, FKM: 514684-001 (minimum order quantity required)
- Sub-Base with M5 connections and O-ring seals available on request

### Installation

- The solenoid valves can be mounted in any position without affecting operation